

WHAT IS CLAIMED IS:

1. An electrophotographic photoreceptor comprising:  
a conductive substrate; and  
a photosensitive layer on the conductive substrate  
and being exposed to coherent light,  
wherein surface roughness of the conductive substrate  
is such that maximum peak-to-valley roughness height ( $R_y$ ),  
centerline average roughness ( $R_a$ ), ten-point average  
roughness ( $R_z$ ) and average peak-to-peak distance that is an  
average of a peak-to-peak distance of a cross-sectional  
curve ( $S_m$ ) satisfy:  
(a)  $R_y = 0.8$  to  $1.4 \mu\text{m}$ ,  
(b)  $R_a = 0.10$  to  $0.15 \mu\text{m}$ ,  
(c)  $R_z = 0.7$  to  $1.3 \mu\text{m}$ , and  
(d)  $S_m = 5$  to  $30 \mu\text{m}$ , and  
the peak count  $P_c$  satisfies:  
(e)  $P_c = 60$  to  $100$ .

2. A method for producing an electrophotographic  
photoreceptor in which a charge generating layer and a  
charge conveying layer, or an underlying layer, a charge  
generating layer and a charge conveying layer, are formed  
on a conductive substrate by sequentially coating, the  
method comprising:

preparing the conductive substrate in which maximum

peak-to-valley roughness height ( $R_y$ ), centerline average roughness ( $R_a$ ), the ten-point average roughness ( $R_z$ ) and average peak-to-peak distance that is an average of the peak-to-peak distance of a cross-sectional curve ( $S_m$ ) satisfy:

- (a)  $R_y = 0.8$  to  $1.4 \mu\text{m}$ ,
  - (b)  $R_a = 0.10$  to  $0.15 \mu\text{m}$ ,
  - (c)  $R_z = 0.7$  to  $1.3 \mu\text{m}$ , and
  - (d)  $S_m = 5$  to  $30 \mu\text{m}$ , and
- peak count  $P_c$  satisfies:
- (e)  $P_c = 60$  to  $100$ ;

sequentially measuring thicknesses of the layers by optical interferometry when the coating is performed to form the layers on the conductive substrate;

feeding back measurement results to controlling means; and

controlling an amount of coating by an output from the controlling means in accordance with the measurement results so as to adjust the thicknesses of the layers.

3. An image forming apparatus comprising:

an electrophotographic photoreceptor of claim 1; and  
an exposure apparatus for conducting image-exposure at a pixel density of 1200 dpi or more so as to form an electrostatic latent image on a surface of the

electrophotographic photoreceptor.

4. The image forming apparatus of claim 3, wherein the exposure apparatus emits laser light having a wavelength of 780 nm.